Model J2240

Upgrade Instructions

J Class Workstations

HP Part Number A2876–90012
Edition E0198

Hewlett–Packard Company

3404 E. Harmony Rd., Ft. Collins, CO 80528–9599

Printing History

New Editions of this manual incorporate all material updated since the previous edition. Update packages may be issued between editions and contain replacement and additional pages to be merged into the manual by the user.

The manual printing date and part number indicate its current edition. The printing date changes when a new edition is printed. (Minor corrections and updates which are incorporated at reprint do not cause the date to change.) The manual part number changes when extensive technical changes are incorporated.

HP Part Number	Printing Date	Edition Number
A2876–90010	November1996	Edition 1
A2876–90011	January 1997	Edition 2
A2876–90012	January 1998	Edition 3

⚠ WARNING!

You **must** perform the following steps instead of Step 1 on page 5 and before performing Step 2 on page 5 of the *Model J2240 Upgrade Instructions J Class Workstation*s manual or your computer will not work after you complete the upgrade.

Install PHCO_13952 J2240 Upgrade Utilities Patch

1. The workstation must be running HP–UX 10.20 ACE (Feb 1998) plus J2240 Workstation software or later to accommodate the J2240 upgrade. If the workstation is running a version of HP–UX lower than 10.20, update the operating system software before continuing.

Verify that you have the necessary operating system software loaded on your system PRIOR to performing the upgrade procedure. Use the command

uname –r

to determine the revision of your base operating system. It should report:

```
B.10.20
```

Also check to see if you have the necessary Additional Core Enhancement (ACE) bundles to support the J2240 hardware: To do so, execute this command:

$ /usr/sbin/swlist –l bundle | grep ACE

Look for the following lines in the output:

```
Workstation ACE for HP–UX 10.20 (July 1997)
J2240 Workstation ACE for HP–UX 10.20 (February 1998)
```

If this software is not present, use the *J2240 Software Kit* (p/n B3782–67989) which is included with your hardware upgrade kit. Follow the instructions in the *Read Before Installing the J2240 Software Kit* manual to load the software. We also recommend installing the software diagnostics included in that kit.

2. To obtain the J2240 Upgrade Utilities Patch from the HP Electronic Support Center (HP ESC), go to the appropriate website listed below.

- Americas and Asia: http://us–support.external.hp.com
- Europe: http://europe–support.external.hp.com

3. Login to the HP ESC, using your User ID and password.
(If you have not already registered with the HP ESC, click on the **Register Now** link, read the Terms & Conditions agreement, enter your user information and password to login to the HP ESC. Be sure to record your User ID and password. Then go to the HP ESC Main Page.)

4. Click on the **Patch Database** link.

5. Scroll down on the Patch Database Main page and click on the **Retrieve a Specific Patch** link.

6. Enter the Patch Name **`PHCO_13952`** and click on **Retrieve**.

7. Before downloading the patch, read the **`Installation Instructions`** on the Patch Description page. Note that these instructions are included as part of the patch download.

8. Click on **Download** to download the the patch software. Enter **`/tmp/PHCO_13952`** as the directory and filename in the Selection dialog box.

9. Follow the installation instructions included with the patch or the instructions found on the Patch Description page to install the patch.

10. When you complete the patch installation instructions, go to Step 2 on page 5 of the the *Model J2240 Upgrade Instructions J Class Workstation*s manual and continue the upgrade instructions.

Emissions Regulations

Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules and the Canadian Department of Communications. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception (determined by turning the equipment off and on), you can correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Ask the dealer or an experienced radio/television technician for help.

Hewlett–Packard's system certification tests were conducted with HP–supported peripheral devices and HP shielded cables, such as those you receive with your computer. Changes or modifications not expressly approved by Hewlett–Packard could void the user's authority to operate the equipment.

Operation of this device is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept interference received, including interference that may cause undesired operation.
- Cables used with this device must be properly shielded to comply with the requirements of the FCC.

VCCI Class 2 ITE

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取り扱い説明書に従って正しい取り扱いをして下さい。

Emissions Regulations Compliance

Any third–party I/O device installed in HP system(s) must be in accordance with the requirements set forth in the preceding Emissions Regulations statements. In the event that a third–party noncompliant I/O device is installed, the customer assumes all responsibility and liability arising therefrom.

Electrostatic Discharge (ESD) Precautions

Electrostatic charges can damage the integrated circuits on printed circuit boards. To prevent such damage from occurring, observe the following precautions when unpacking and installing the board.

- Stand on a static–free mat.
- Wear a static strap to ensure that any accumulated electrostatic charge discharges from your body to ground.
- Connect all equipment together, including the static–free mat, static straps, routing nodes, and peripheral units.
- Keep uninstalled printed circuit boards in their protective antistatic bags.
- Handle printed circuit boards by their edges, once you have removed them from their protective antistatic bags.

Warnings and Cautions

WARNING:

Removing device cover may expose sharp edges in equipment chassis. To avoid injury, use care when installing customer add–on devices.

WARNUNG:

Das Entfernen der Geräteabdeckung legt die scharfen Kanten im Inneren des Gerätes frei. Um Verietzungen zu vermeiden, seien Sie vorsichtig beim Einbau von zusätzlichen Bauteilen, die vom Kunden selber eingebaut werden können.

AVERTISSEMENT:

Des bords tranchants du châssis de l’équipement peuvent être exposés quand le cache de l’unité n’est pas en place. Pour éviter des blessures, faire très attention lors de l’installation de modules supplémentaires par le client.

WARNING:

Disconnect power plug from wall outlet or source power before moving or removing the device, or installing add–on components.

WARNUNG:

Entfernen Sie die Stromzuführung von der Steckdose oder der Stromquelle bevor Sie das Gerät bewegen, abbauen, oder zusätzliche Bauteile installieren.

AVERTISSEMENT:

Débrancher la fiche de la prise de courant ou de la source d’alimentation électrique avant de déplacer ou de retirer l’unité, ou avant d’installer des modules supplémentaires.

NOTICE

The information contained in this document is subject to change without notice.

HEWLETT–PACKARD WARRANTY STATEMENT

HP PRODUCT	DURATION OF WARRANTY
J2240 Upgrade	one year

1. HP warrants HP hardware, accessories and supplies against defects in materials and workmanship for the period specified above. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products which prove to be defective. Replacement products may be either new or like–new.

2. HP warrants that HP software will not fail to execute its programming instructions, for the period specified above, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace software media which does not execute its programming instructions due to such defects.

3. HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, customer will be entitled to a refund of the purchase price upon prompt return of the product.

4. HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.

5. The warranty period begins on the date of delivery or on the date of installation if installed by HP. If customer schedules or delays HP installation more than 30 days after delivery, warranty begins on the 31st day from delivery.

6. Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.

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Kit Contents

- New Main Tray Assembly (CPU board)
- New PCI/EISA Assembly
- New I/O Assembly
- *Support Media User Manual PA–RISC Computer System*
  HP Part Number B3782–90202
- *Model J2240 Upgrade Instructions J Class Workstations*
  HP Part Number A2876–90012
- J2240 Model Label
- Static strap
- Upgrade return materials

CAUTION: You **MUST** remove **ALL** old assemblies before installing the new upgrade assemblies or you **WILL** damage your system.

Installation Prerequisites

Before the J2240 Upgrade can be performed both HP–UX 10.20 ACE (April 1998) and a supported graphics card must be installed (graphics card not required if system is used with a RS–232 terminal as the console).

Operating System

Verify that you have loaded the necessary operating system software on your system (HP–UX 10.20 ACE (April 1998) or later). This software **must** be loaded on the system before performing this upgrade procedure. We also recommend installing software diagnostics.

Graphics Card Support

Verify that the graphics card(s) installed in your Model J282 are supported on the Model J2240. The **/usr/bin/graphinfo** command will display the current graphics card(s) information. Both HCRX–8 and HCRX–24Z cards will require a physical inspection of the card to verify the Z–Accelerator part number. The first 5 alpha–numeric characters on the Z–Accelerators white label must read A4242 . The Z–Accelerator is the small daughter card. If a graphics upgrade is required, it should be performed prior to the J2240 Upgrade. The graphics card(s) supported on the Model J2240 are:

- HP VISUALIZE–8, 24, 48, 48XP graphics cards
- HP VISUALIZE EG and Dual EG graphics cards
- HP VISUALIZE FX2, FX4 and FX6 graphics cards
- HCRX–8 (A4070A/B)
- HCRX–24 (A4071A/B)
- A4070A/B + A4242A (HCRX–8Z with the A4443A upgrade)
- A4071A/B + A4242A (HCRX–24Z with the A4443A upgrade)

NOTE: The COLOR/DUAL COLOR(A4077/78A) graphics card(s) will not work with HP−UX 10.20.

Tools

- Flat blade screwdriver
- #20, #15 Torx drivers
- Anti–static bag
- Static strap
- Safety glasses (needed for Model J2240 Label change)

Associated Documentation

The following documents are associated with the upgrade kit.

- *J282/2240 Service Handbook* (HP Part Number A2876–90041)*
- *J282/2240 Owner's Guide(*HP Part Number A2876–90015)*
- *Model J2240 Upgrade Instructions J Class Workstations*
  HP Part Number A2876–90012 (This document)

*Not included with this kit.

Upgrade Procedures

The upgrade procedure consists of the following sections:

- Powering Off the System
- Removing the I/O Assembly
- Removing the EISA Assembly
- Removing the Front Bezel
- Removing the Main Tray Assembly
- Removing Memory DIMMs
- Installing the Memory DIMMs
- Installing the new J2240 Main Tray Assembly
- Changing the Model Label
- Replacing the Front Bezel
- Installing the PCI/EISA Assembly
- Installing the I/O Assembly
- Verifying system operation
- Filling out the return form and returning original parts

Powering Off the System

Before performing this upgrade procedure, observe the following precautions:

1. The workstation must be running HP–UX 10.20 ACE (April 1998) or later to accommodate the J2240 upgrade. If the workstation is running a version of HP–UX lower than 10.20, update the operating system software before continuing.

Verify that you have the necessary operating system software loaded on your system PRIOR to performing the upgrade procedure. Use the command

uname –r

to determine the revision of your base operating system. It should report:

```
B.10.20
```

Also check to see if you have the necessary Additional Core Enhancement (ACE) bundle to support the J2240 hardware: To do so, execute this command:

$ /usr/sbin/swlist –l bundle | grep ACE

Look for the following line in the output:

```
Workstation ACE for HP–UX 10.20 (April 1998)
```

If this software is not present, upgrade your system to include this software. We also recommend installing the software diagnostics included in that kit.

2. Determine the workstation's LAN ID using the **lanscan** command by entering the following:

/usr/sbin/lanscan

The output is similar to the following:

```
Hardware Station         Crd Hardware Net–Interface  NM MAC    HP DLPI Mjr
Path     Address         In# State    NameUnit State ID Type   Support Num.
8/12/6   0x08000970ECC0  0   UP       lan0     UP    4  ETHER  Yes     52
```

After you install the new Main Tray assembly and power on the system for the first time, you will be prompted for the LAN ID. Record that information here so you have a record of it:

EtherLAN ID _____–_____

You must supply the dash (–) between the first six digits and the last six digits. For example the LAN ID from above would be 080009–70ECC0.

3. Run the upgrade utility program to automatically convert the hardware paths stored in the system's I/O configuration file. You should only run this utility if you are going to complete the rest of the hardware upgrade described in this document.

Enter the following command to run the upgrade utility program:

/usr/sam/lbin/jclass_upgrade

The upgrade utility prompts you to confirm that you want to continue, as follows:

```
Are you ready to perform the upgrade (y/n [n])?
```

Enter **Y**.

The upgrade utility proceeds to modify the I/O configuration information that is stored int he files **/etc/ioconfig** and **/stand/ioconfig** to be compatible with the upgraded system. The original I/O configuration information is saved in the backup file **/etc/ioconfig.pre_upgrade**.

NOTICE: The jclass_upgrade utility modifies the hardware configuration so that it is incompatible with a Model J282 system. After running the utility you must continue withthis upgrade or restore the configuration information from **/etc/ioconfig.pre_upgrade** to **/etc/ioconfig** and **/stand/ioconfig**.

4. Power down the system. Use the command

shutdown –h now

to shutdown the HP–UX operating system. Then turn the system unit off.

5. Unplug the system unit power cord and the power cords of any peripheral devices from ac wall outlets.

6. Disconnect all peripheral cables from the system unit connectors.

7. Unplug the system unit power cord from the ac input connector at the back of the system unit.

WARNING: To avoid electrical shock, make sure that you unplug the power cable from the wall outlet and the system unit before proceeding further.

CAUTION: The internal components of the workstation are susceptible to mechanical and electrostatic shock. To prevent such damage from occurring, observe the following precautions during the installation procedure:

- Stand on static–free mat
- Wear a static–grounding wrist strap to ensure that any accumulated electrostatic charge discharges from your body to ground. Attach the static–grounding wrist strap by following the instructions on the pack age that contains the strap. Be sure to attach one end of the strap to the system chassis.

Removing the J282 I/O Assembly

The following steps describe how to remove the J282 I/O Assembly.

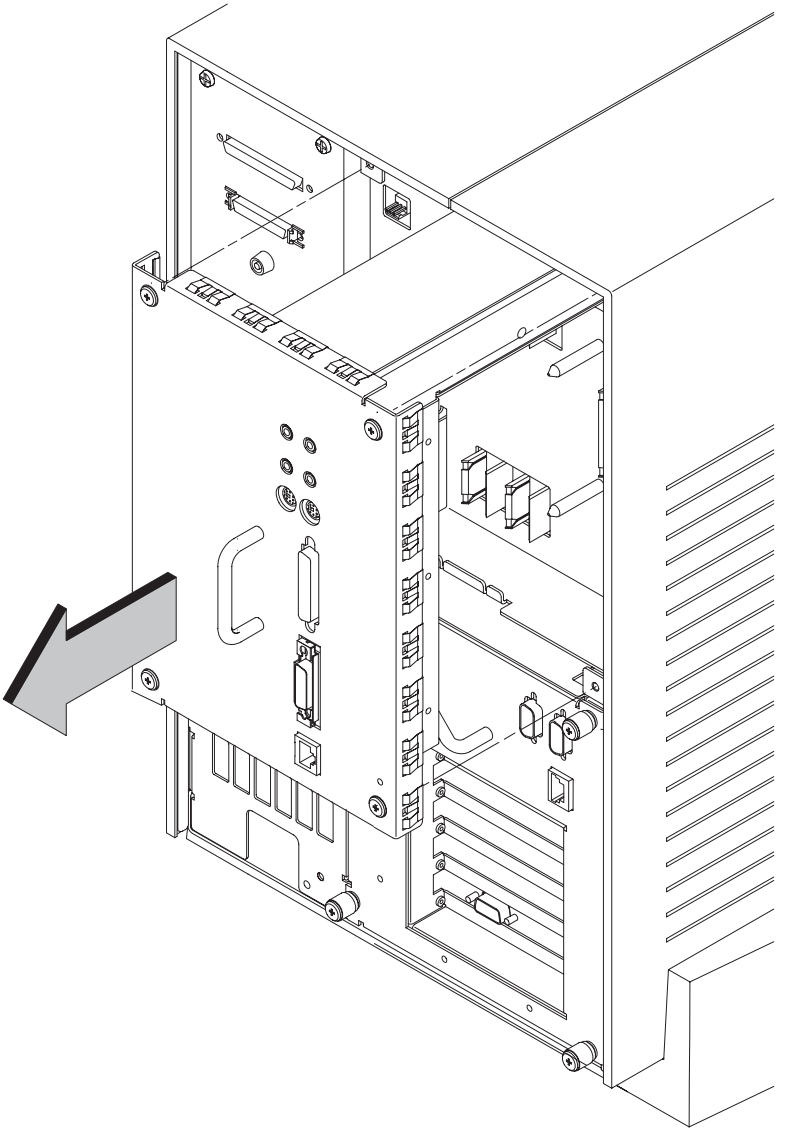

Figure 1. J282 I/O Assembly removal

1. Attach the static–grounding wrist strap by following the instructions on the package. Attach the the sticky end of the wrist strap to bare metal on the system unit.

2. Disconnect all peripheral cables from the I/O Assembly connectors.

3. Loosen the the four screws on the J282 I/O Assembly using a #20 Torx or flat–blade screwdriver.

4. Slide out the J282 I/O Assembly using the handle, and set it aside.

Removing the J282 EISA Assembly

Follow these steps to remove the J282 EISA Assembly from your workstation:

1. Disconnect all peripheral cables from the EISA Assembly connectors.

2. Working from the rear of the workstation, unscrew the four captive screws.

3. Pull the EISA Assembly straight out using the handle. See Figure 2.

4. Set the EISA Assembly aside.

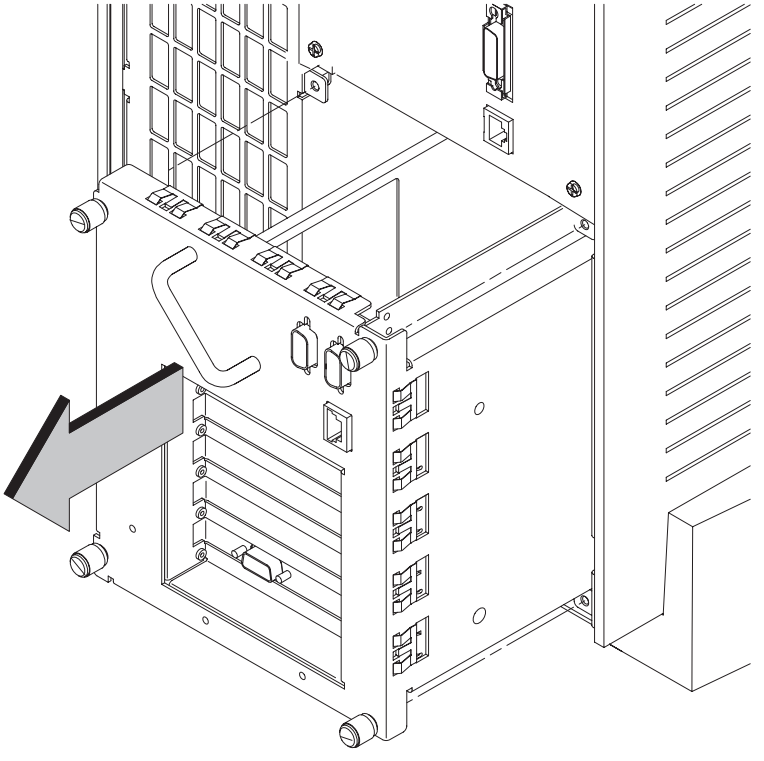

Figure 2. Removing the J282 EISA Assembly

Removing the Front Bezel

To remove the front bezel follow these steps:

CAUTION: **Do not** attempt to operate the workstation with the front bezel removed. The bezel is needed to ensure proper air flow for system cooling.

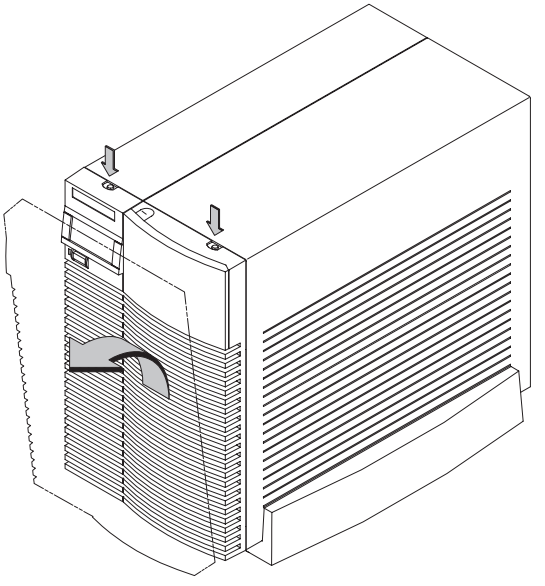

Figure 3. Removing the Front Bezel

1. Release the front bezel by pushing in the two locking tabs at the front of the system unit as shown in Figure 3.

2. Swing the panel down and pull up slightly so the two guide pins on the bottom clear their guides and lay the front bezel down.

Removing the J282 Main Tray Assembly

To remove the J282 Main Tray Assembly (CPU Tray) follow these steps:

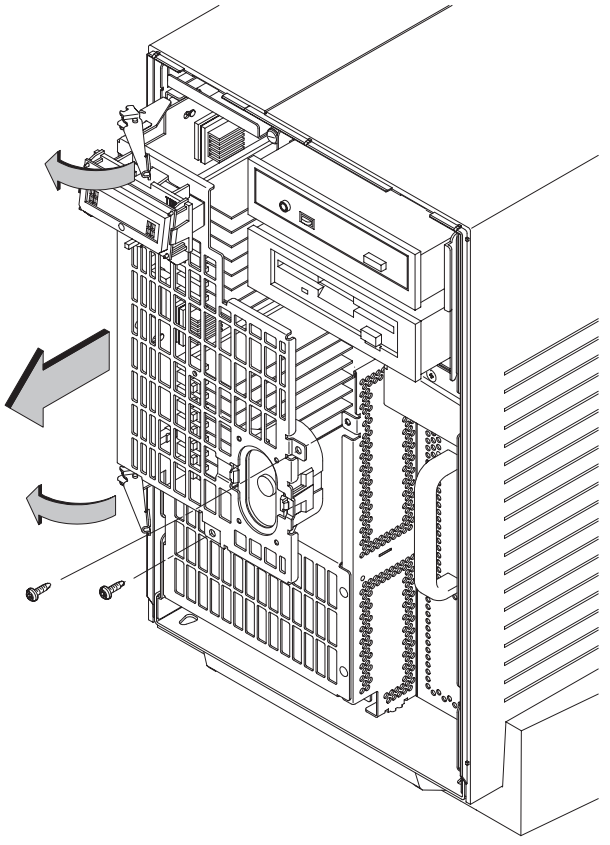

Figure 4. Removing the Main Tray Assembly

1. Remove the two screws in the center of the J282 Main Tray Assembly using a #20 Torx driver.

2. Pull the ejector handles on the left side, top and bottom of the Main Tray Assembly to release the board assembly from the internal connectors. Refer to Figure 4.

3. Pull the Main Tray Assembly straight out and place on a flat surface. This assembly is heavy. Move it slowly and be sure it is properly supported.

CAUTION: The CPU Modules are **HOT** and may cause burns. Allow the Main Tray sufficient time to cool before removing it. You should also allow sufficient time for the CPU Modules to cool before removing memory DIMMs.

4. Unpack the new J2240 Main Tray Assembly and set it next to the old J282 Main Tray Assembly. The next steps describe how to remove the memory DIMMs from the J282 Main Tray and install them in the J2240 Main Tray.

Removing Memory DIMMs

To remove the memory modules from the J282 Main Tray (CPU board), do the following:

1. Locate the memory DIMMs in the Main Tray, as shown in Figure 5.

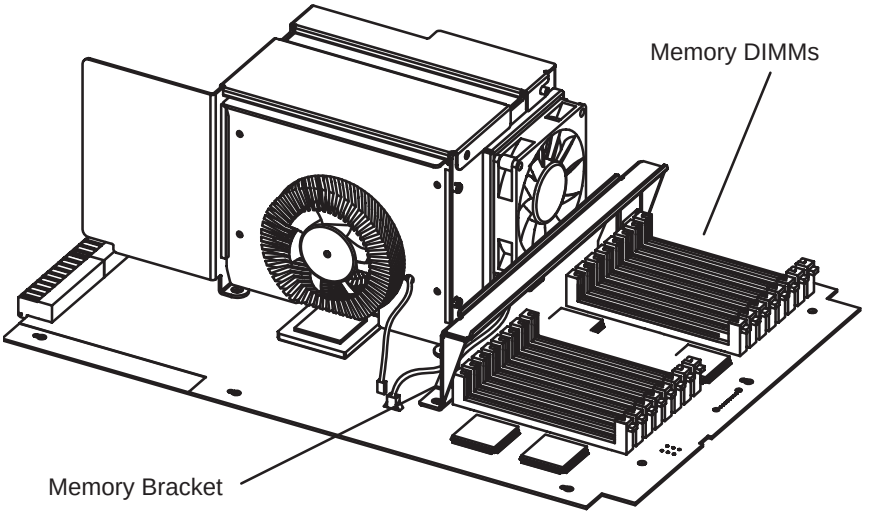

Figure 5. Memory Retention Bracket and Memory DIMM Location

2. Remove the Memory Retention Bracket (if in place) and set aside.

3. To remove a memory DIMM, push the ejector handles on the side of the DIMM. Lift the memory DIMM up and out of the connector. Place the memory DIMM on a static–free service. Figure 6 shows how to remove the memory DIMM.

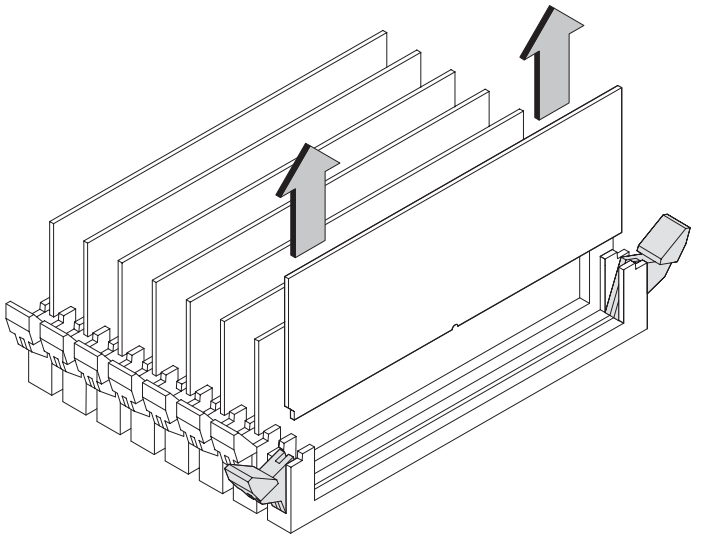

Figure 6. Removing Memory DIMMs

Installing Memory DIMMs

Install the memory DIMMs in the new J2240 Main Tray as described in the following procedure:

1. To install a memory DIMM, open the ejector tab and line the DIMM up with the guides as shown in Figure 7, making sure to put the notched end toward the white ejector handle. **READ NOTICE** below and follow slot guide shown in Figure 7.

2. Close the ejector tabs.

3. Press firmly and evenly on the DIMM to ensure that it is fully seated.

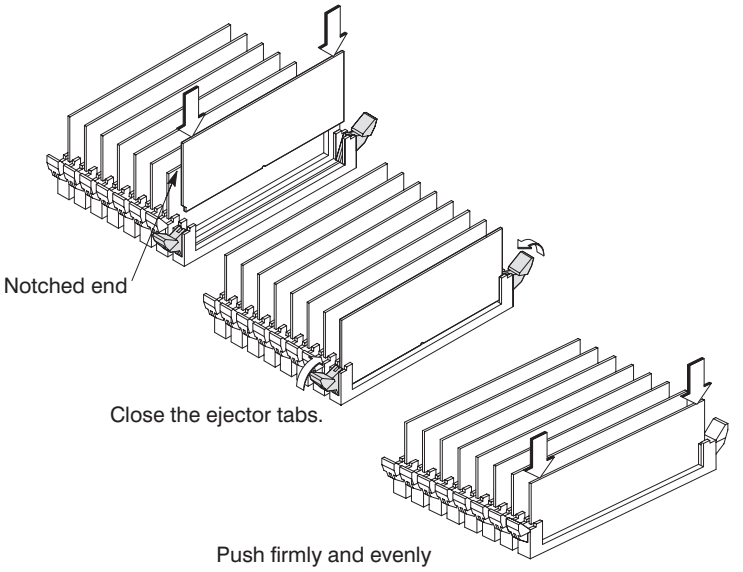

Figure 7. Installing Memory DIMMs

NOTICE: Install memory DIMMs in the J2240 DIMM slots as pairs (DIMMs must be same size to make a pair). Load DIMMs in ascending pair order (e.g. pair 1 then pair 2). Use Figure 8 as a guide.

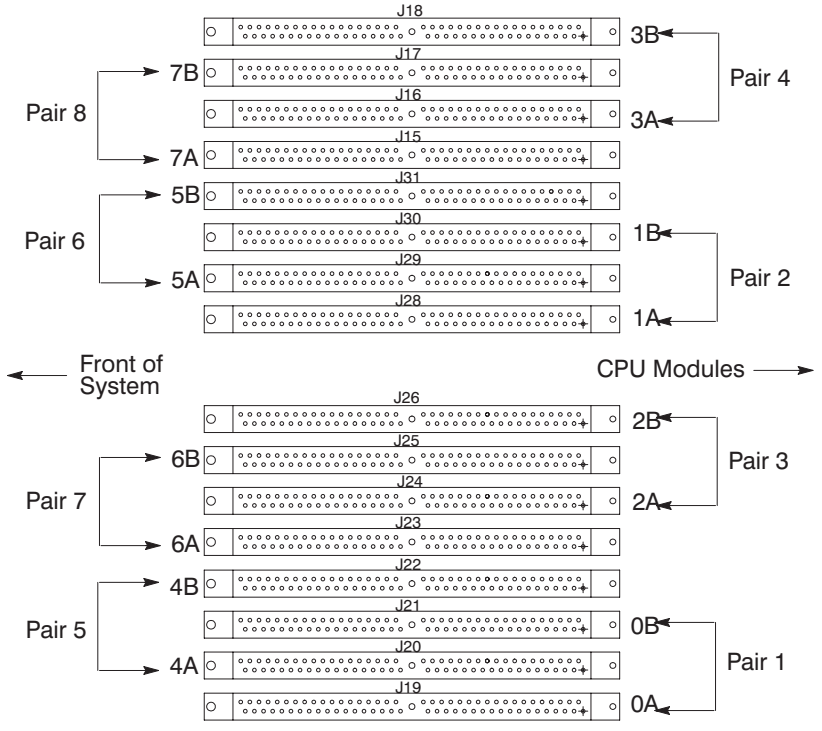

Figure 8. J2240 Memory DIMM Slot Guide

4. Install the Memory Retention Bracket on the New Main Assembly Tray.

Installing the New J2240 Main Tray Assembly

Install the new J2240 Main Tray Assembly as described in the following procedure:

1. Remove insulator strip from the calendar battery on the new J2240 Main Tray Assembly.

2. Pull Main Tray Ejector Handles to open position.

CAUTION: Do Not install the J2240 Main Tray Assembly until you have removed the J282 EISA Assembly or you will damage connectors on both assemblies.

3. Align the top of the CPU board in the J2240 Main Tray Assembly with the guides on the system unit. Then, align the bottom of the CPU board with the guides and slide the main tray assembly into the system unit. Refer to Figure 9. Refer also to the installation label on the inside of the system unit.

NOTICE: Ejector handles work best for the last 2.5 mm (0.10 inch) of insertion. Press the Main Tray Assembly into place with your hands. Then use the ejector handles for the final insertion.

NOTICE: When inserting the Main Tray Assembly, be careful not to bend the Memory DIMMs while lifting the Main Tray. This will damage the memory connectors and DIMMs

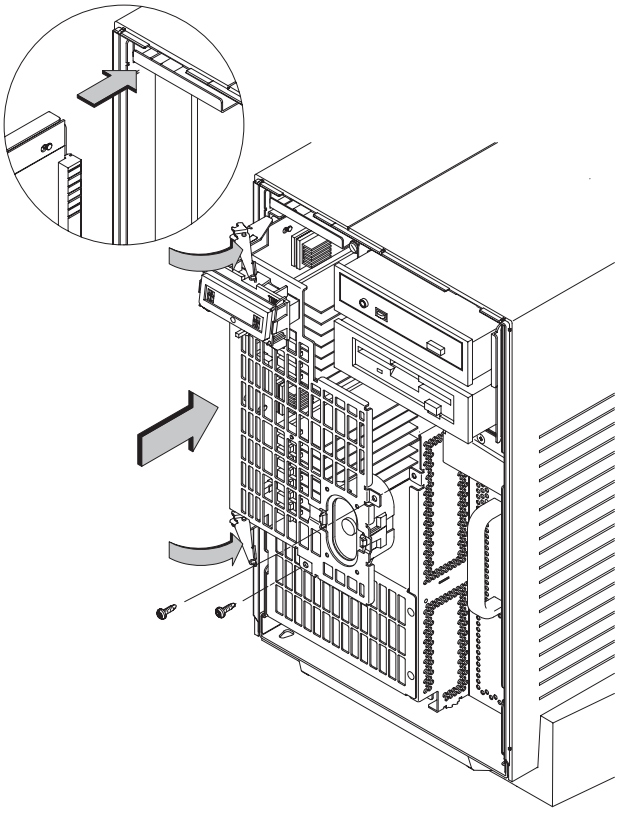

Figure 9. Replacing the Main Tray Assembly

4. Replace the two main tray retaining screws, as shown in Figure 9.

Changing the Model Label

Before replacing the front bezel, you need to remove the old model label. Follow these steps to remove the old model label and replace it with the new model label.

1. Using a flat blade screwdriver on the inside of the front bezel, break off the plastic tab behind the sheet metal as shown in Figure 10.

CAUTION: Be sure to wear safety glasses when breaking off the plastic tab. Failure to do so can result in injury to your eyes.

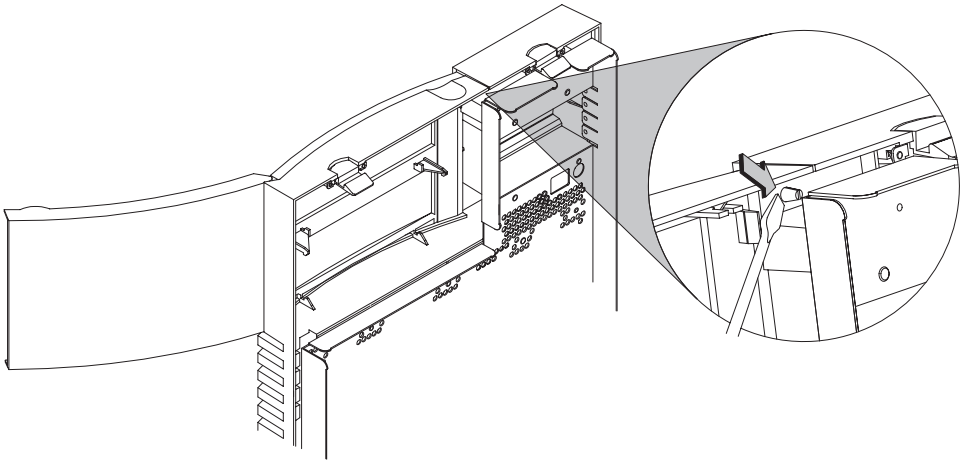

Figure 10. Breaking Off the Plastic Tab

2. Turn the front bezel over so that you are looking at the outside.

3. Using the flat blade screwdriver, gently pry up the model label at each of the three sets of plastic grooves holding the label to the bezel. Refer to Figure 11.

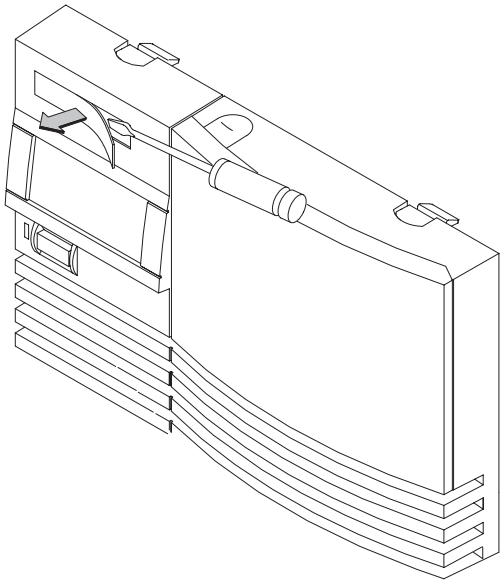

Figure 11. Prying Off the Old Model Label

4. Press the new model label into the three grooves.

Replacing the Front Bezel

When replacing the front bezel, follow these steps, ensuring that the top latches snap completely into position:

1. Line up the two guide pins on the bottom with their guides and swing the panel up.

2. Push the front bezel against the two locking tabs at the front of the system unit and ensure they lock in place. If necessary, press down on the top of the bezel to properly align the bezel.

CAUTION: **Do not** attempt to operate the workstation with the front bezel removed. The bezel is needed to ensure proper air flow for system cooling.

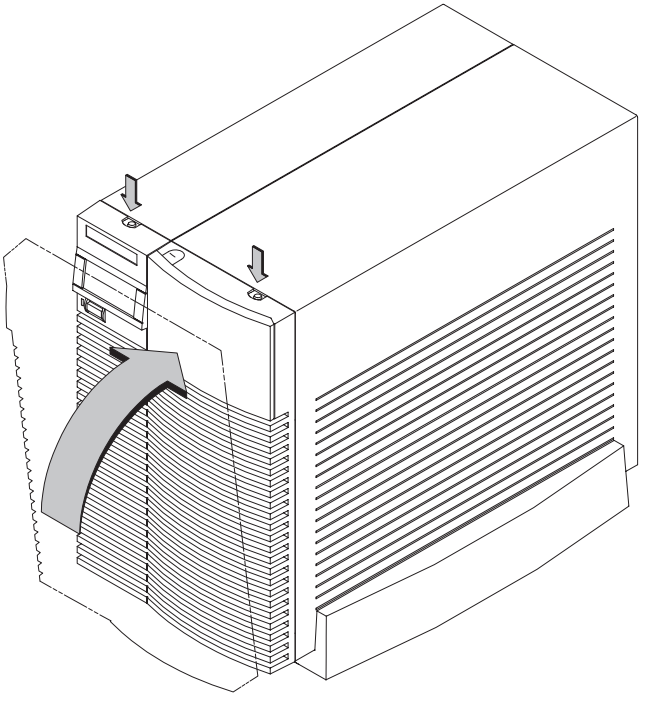

Figure 12. Replacing the Front Bezel

Installing the PCI/EISA Assembly

Move your GSC/EISA cards from your J282 EISA Assembly to your J2240 PCI/EISA Assembly and install the J2240 PCI/EISA Assembly by using the following steps:

1. Place both of the assembly units side by side and rotate them 90 degrees clockwise and place on a flat surface, as shown in Figure 13.

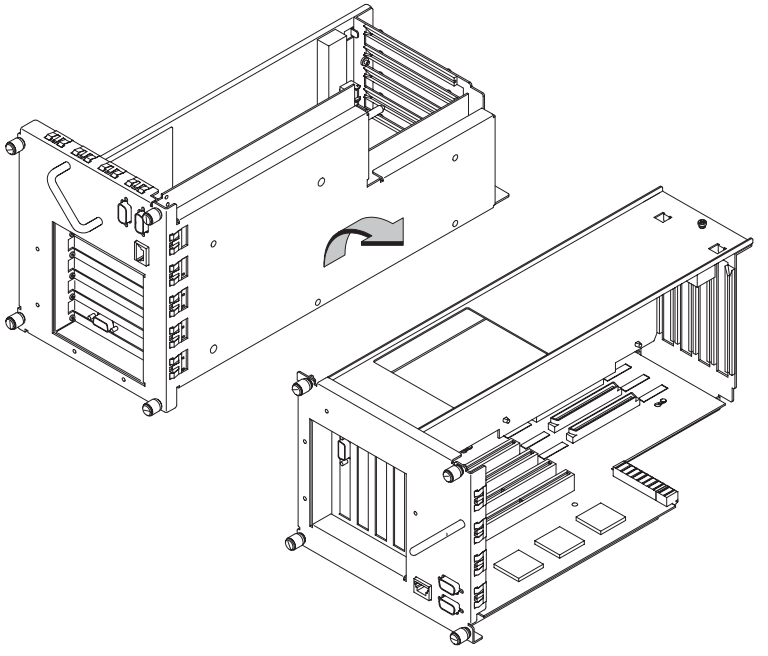

Figure 13. Rotating the PCI/EISA Assembly for Installation

2. Unscrew one screw at the back of each of the covers using a #15 Torx driver and lift the covers up and out to remove them from the EISA Assemblies. See Figure 14.

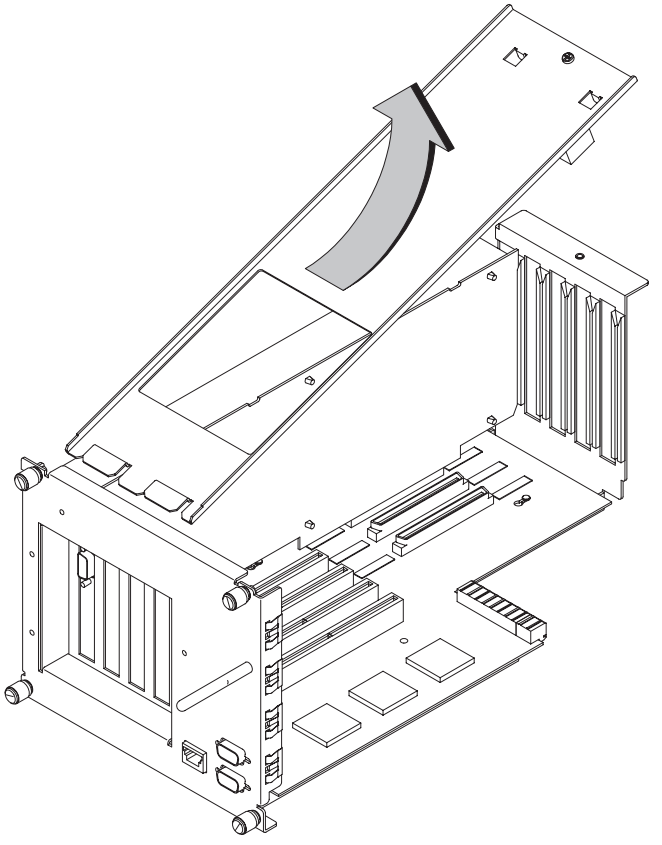

Figure 14. Removing the EISA Assembly Cover

3. Unscrew one screw at the top of the slot cover of the J2240 PCI/EISA Assembly using a #15 Torx driver and pull the cover straight up to remove it. See Figure 15.

4. To remove a board from the J282 EISA assembly, unscrew one screw at the top of the slot handle and put the card edge and handle straight up to remove it.

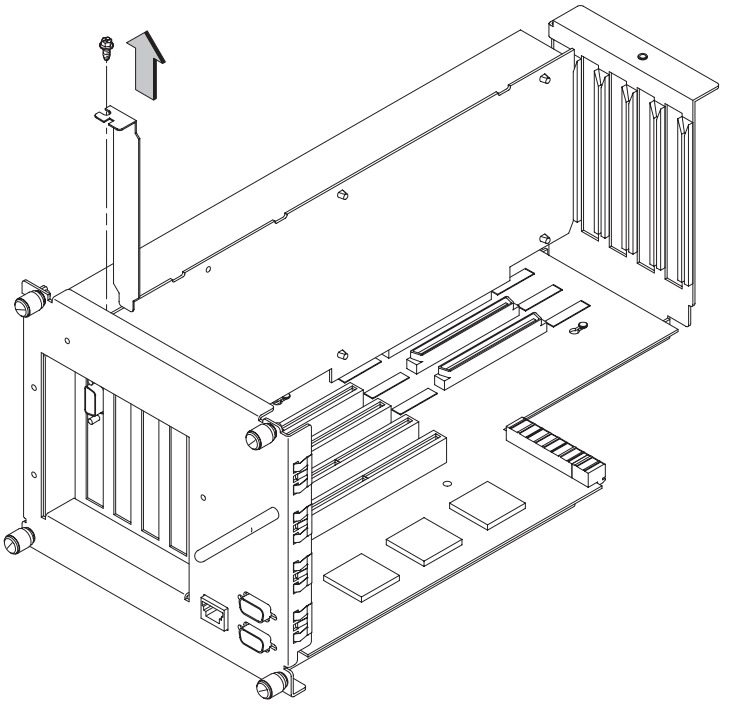

Figure 15. Removing the J2240 PCI/EISA Slot Cover

5. Place GSC or EISA board removed from the J282 that you are installing into the J2240 in the board guides and slide firmly into the connector. Check to see the board is evenly inserted to seat properly. See Figure 16.

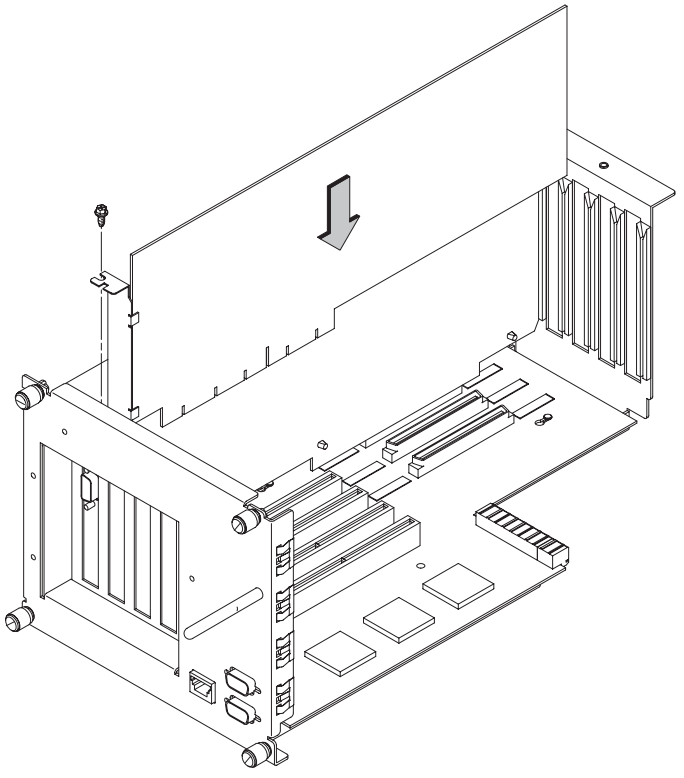

Figure 16. Installing a GSC, EISA, or Graphics Board in the J2240 PCI/EISA Assembly

6. Secure board with one screw in top of board connector bracket.

7. Before installing the cover on the J2240 PCI/EISA Assembly, if you installed an EISA or graphics board that is taller than a PCI card remove the small break–off block from the cover that corresponds to that slot. Refer to Figure 17, which shows the block removed for Slot 0.

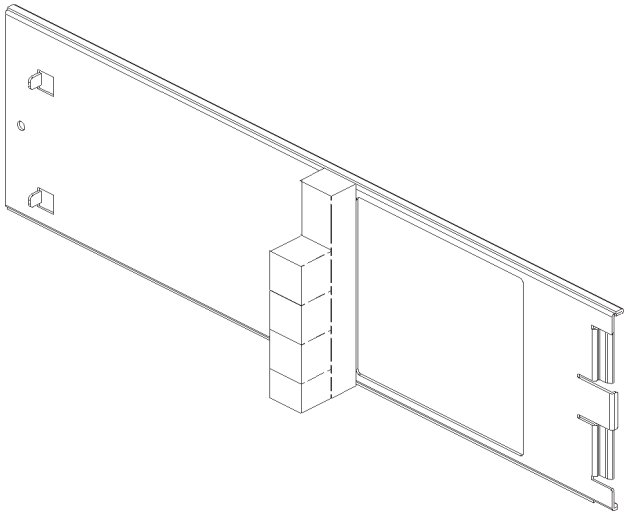

Figure 17. Remove Block from J2240 PCI/EISA Assembly Cover

8. Insert cover in guide and secure with screw. Refer to Figure 18.

CAUTION: The Guide must be properly and completely installed in the slot or the cover may dislodge and prevent you from removing the PCI/EISA Assembly from the system unit.

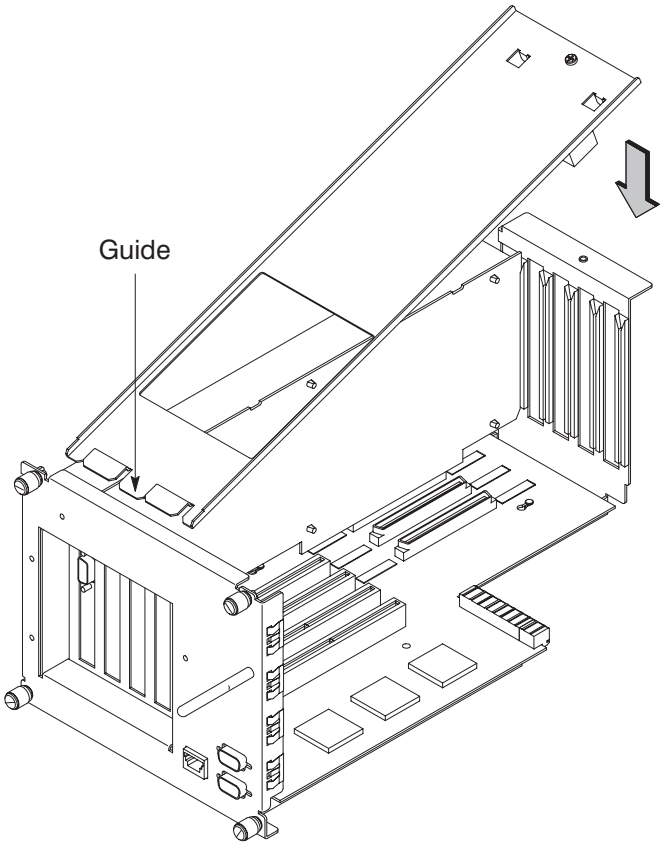

Figure 18. Replacing J2240 PCI/EISA Assembly Cover

9. Remove the plastic Connector Protector from the J2240 PCI/EISA Assembly connector (if present).

10. Rotate the J2240 PCI/EISA Assembly unit back 90 degrees as shown in Figure 19 and grasp the handle.

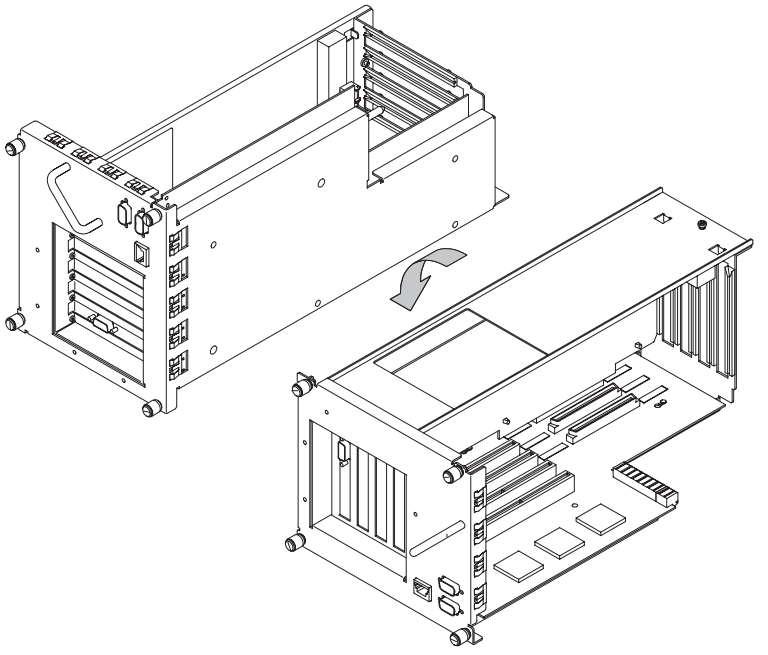

Figure 19. Rotating the J2240 PCI/EISA Assembly Back

11. Slide the J2240 PCI/EISA Assembly into the system unit and secure it with the four captive screws. See Figure 20. You may need to tip or rotate the PCI/EISA assembly slightly to get it past the system unit tie–down point.

CAUTION: Do Not install the J2240 PCI/EISA Assembly until you have replaced the J282 Main Tray Assembly with the new J2240 Main Tray Assembly or you will damage connectors on both assemblies.

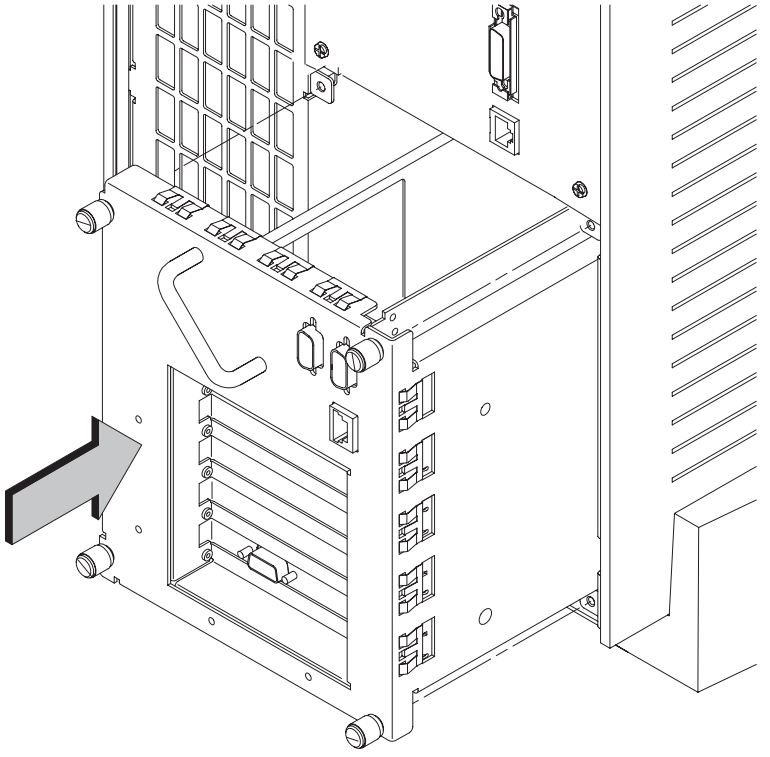

Figure 20. Replacing J2240 PCI/EISA Assembly

NOTICE: You may need to exert strong pressure to fully seat the J2240 PCI/EISA Assembly

Installing the New J2240 I/O Assembly

The installation of the J2240 I/O Assembly is detailed in the following steps:

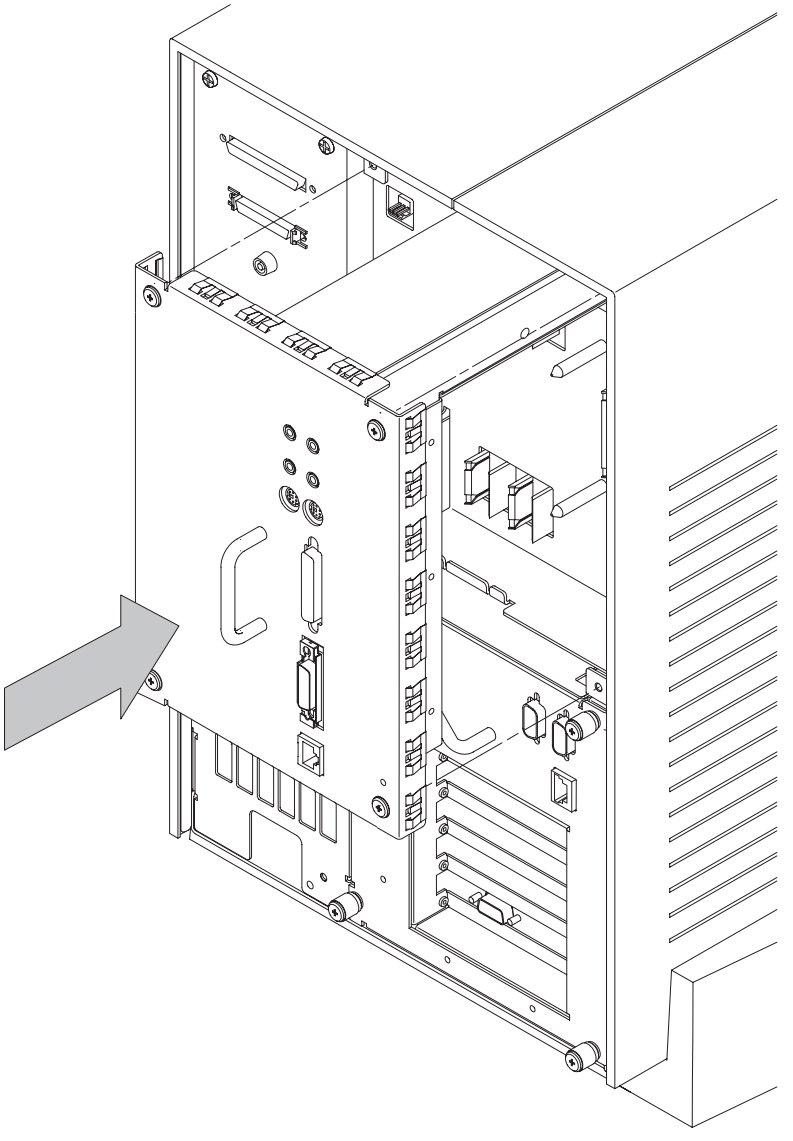

Figure 21. J2240 I/O Assembly installation

1. Slide the J2240 I/O Assembly in position using the handle.

2. Install the the four screws on the J2240 I/O Assembly using a #20 Torx driver.

NOTICE: The I/O Assembly has a new regulatory label which references a different product number than that of the adjacent SCSI Bulkhead. Reference the product number (A4943) on the I/O Assembly when placing calls for support.

Verifying System Operation

To verify the system operation, follow these steps:

1. Reconnect the power cables and any other cables that were disconnected when opening the workstation.

2. Power on the system.

When the system is booted for the first time, you are prompted for the LAN ID. Enter the LAN ID that you recorded in the section, “Powering Off the System”.

Note the status message on the LCD display. Once the power on diagnostics have completed and the system has booted, the second line on the LCD display should read “HP J2240.”

If the system fails to boot or power up refer to the *Solving Problems* chapter of the *J282/2240 Owners Guide*.

If you have any questions, suggestions, or problems with our hardware, software, or documentation, please call 1–888–301–5932 (US & Canada) or contact the HP Response Center for your country.

Filling Out the Return Form and Returning Original Parts

Follow the instructions on the *Hewlett Packard Upgrade Return Instructions* sheet included with the upgrade return kit. You must return the original parts to Hewlett Packard according to those instructions.

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